

**FIELD CHECKLIST OF INFORMATION TO RECORD DURING WALKOVER SURVEYS TO IDENTIFY POTENTIAL SOURCES OF CONTAMINATION**

**Nathanail, J., Bardos, P. and Nathanail, P. (2002)  
Contaminated Land Management: Ready Reference. EPP Publications.**

**DESCRIPTION OF VICINITY OF SITE**

<p><b>1. Are there any street/house/locality/pub names indicating current or former land use?</b></p>
<p><b>2. What are the neighbouring land uses?</b></p>
<p><b>3. Are there any potential receptors (if yes, describe)?</b></p>

**4. Are there any potential site sources of contamination (if yes, describe)?**

**5. Are there any indications of remedial measures e.g. gas venting pipes, plant room for remedial systems?**

**6. Are there any indications of recent site investigation, e.g. groundwater or gas monitoring wells, debris from trial pits?**

## DESCRIPTION OF SITE

**1. What is the current land use (e.g. vacant, agricultural, and industrial)? Include details (e.g. type of industry)?**

**2. What is the size of site?**

**3. What is the topography?**

**4. Describe the main features (factory buildings, car park, offices, ground cover where no buildings)?**

**5. Are the locations of buildings, roads, fences etc. as per desk study? Record any deviations from those shown on available plans.**

**6. Visit all rooms (if safe) and list nature, contents and use.**

**LOCATE AND RECORD CONDITION OF FEATURES INDICATING POSSIBLE SOURCES OF CONTAMINATION**

**1. Describe remaining buildings and structures on site. Note nature of floor covering**

**2. Describe processes used in each location**

**3. List features suggesting current/former uses**

**4. Are there any fuel or chemical storage tanks (surface and underground)? For each tank record whether it is above/under ground, nature of contents, whether full or empty, bunded/ unbunded/leaking bund, presence of staining. Mark locations on plan.**

**5. What raw materials (e.g. paint) are stored on site, including location?**

**6. What waste products are stored on site including location?**

**7. Are there any outfalls to surface water? If yes, are there discharges and what is the nature of the discharge?**

**8. Are there any small buildings with hazard signs (e.g. boiler room, electricity sub-stations, hazardous materials store)? If yes, describe.**

**9. Are there any remains from previous site investigations? If yes, describe.**

**LOCATE AND RECORD CONDITION OF OTHER SITE FEATURES**

**1. Describe fences and other site security features**

**2. Describe any hydrological features e.g. depth of standing water, direction & rate of flow of water in any rivers, streams or canals; size of ponds, lakes or reservoirs**

## IMMEDIATE HAZARDS

1. Are there any public health or safety hazards (including to trespassers)? e.g. decommissioned petrol tank, unsafe mineshafts, hazardous material, fly tip waste

2. Are there any environmental hazards e.g. oils seeping into watercourse?

**NB: If any immediate hazards are identified, the appropriate bodies should be alerted as soon as possible.**

NOTE PRESENCE OF CONTAMINATION INDICATORS	PRESENT	
	Yea/No	Describe
<ul style="list-style-type: none"> <li>• Site appears different from surrounding area</li> </ul>		
<ul style="list-style-type: none"> <li>• Presence of surface deposits and made ground</li> </ul>		
<ul style="list-style-type: none"> <li>• Signs of settlement, subsidence, disturbed ground or waterlogged areas</li> </ul>		
<ul style="list-style-type: none"> <li>• Stained ground, strange odour</li> </ul>		
<ul style="list-style-type: none"> <li>• Highly coloured soil/deposits</li> </ul>		
<ul style="list-style-type: none"> <li>• Polluted water, gas bubbling through water</li> </ul>		
<ul style="list-style-type: none"> <li>• Areas of bare ground, or distressed vegetation including trees</li> </ul>		
<ul style="list-style-type: none"> <li>• Lack of species diversity, lack of soil fauna, lack of aquatic fauna</li> </ul>		
<ul style="list-style-type: none"> <li>• Presence of indicator species of plants and aquatic macroinvertebrates (see CLR2 Vo12)</li> </ul>		
<ul style="list-style-type: none"> <li>• Evidence of gas production or underground combustion e.g. warning signs, steam/smoke emanating from ground</li> </ul>		
<ul style="list-style-type: none"> <li>• Evidence of seepages through river or canal banks</li> </ul>		
<ul style="list-style-type: none"> <li>• Downstream water quality appears poorer than upstream water quality</li> </ul>		
<ul style="list-style-type: none"> <li>• Hazardous materials signs</li> </ul>		
<ul style="list-style-type: none"> <li>• Hazardous materials used on site (interview employees; consult COSHH files and material safety data sheets (MSDS))</li> </ul>		

## INFORMATION FOR PLANNING SITE INVESTIGATION

**1. What types of services are on site?**

- Telephones (BT)**
- Cable telephones/television**
- Water and sewerage (may be separate providers)**
- Electricity**
- Gas**
- Underground train tunnels (London)**
- Royal Mail postal tunnels (London)**
- Other (state)**

**2. Where are the services located? State if on a plan or marked on site**

**3. Are there any problems with site access e.g. for site investigation equipment, waste disposal vehicles?**

**4. Which areas are suitable for site investigation facilities e.g. offices, laboratories, sample storage, equipment storage, parking?**

**5. Are there any site investigation constraints, e.g. steep slopes, buildings, vegetation?**

**6. What physical hazards are present on site? Tick all that apply. List others.**

- Decaying or partly demolished structures, e.g. holes in floors in dark empty office blocks**
- No electricity (no light in buildings)**
- Vegetation and other debris**
- Old mine shafts, basements, inspection pits, lift shafts etc**
- Other (state)**

**7. What potential chemical hazards are present on site? Tick all that apply. List others**

- Gases/volatiles**
- Contaminants. List likely contaminants:**
  
  
  
  
  
  
  
  
  
  
- Pigeon droppings (inhalation of dried droppings can lead to aspergillosis, histoplasmosis and 'bird fanciers lung').**
- Rat urine in water (can lead to Weil's disease)**
- Asbestos**
- Other (state)**

**8. Will the site investigation have any potential environmental impacts? Tick all that apply. List others.**

- Entry of containment into surface water bodies**
- Entry of contaminants into groundwater**
- Damage to sensitive ecological areas**
- Noise**
- Dust**
- Odour**
- Other (state)**

## POSSIBLE MEANINGS OF ODOURS AND COLOURS ENCOUNTERED DURING WALKOVER SURVEYS

Odours	Possible sources (after Table 17, CLR 2, Vol 2)
Bad eggs	H <sub>2</sub> S
Antiseptic	Phenols
Ether	Solvents
Tarry	Oils/tars
Rotting fish	Amines
Petrol/diesel	Fuel stores

Colours	Common metal compounds (after Table 2, CLR 2, Vol 2) (a = salts; c = compounds, o = oxides)
Green	Chromium s., copper s., cobalt s., ferrous s.
Blue	Chloride, copper s.
Yellow	Arsenic sulphide, chromates
Reddish brown	Ferric c., mercurous arsenate, mercurous sulphide
Pink	Cobalt c. (dark), manganese s. (light)
Black	Many e.g. copper o., nickel sulphide
White	Many e.g. aluminium s., arsenic s.
Blue-black	Thallium sulphide
Red	Arsenic iodide, cobalt s., red lead, mercury s.

### REFERENCE

Nathanail, J., Bardos, P. and Nathanail, P. (2002) Contaminated Land Management: Ready Reference. EPP Publications.

DEPARTMENT OF THE ENVIRONMENT (1994) Contaminated Land Research Report 2, Guidance on Preliminary Site Inspection of Contaminated Land, (Two volumes). DoE, London